

## Exhibit 300: Capital Asset Summary

### Part I: Summary Information And Justification (All Capital Assets)

#### Section A: Overview & Summary Information

**Date Investment First Submitted:** 2009-06-30  
**Date of Last Change to Activities:** 2012-07-25  
**Investment Auto Submission Date:** 2012-02-24  
**Date of Last Investment Detail Update:** 2012-02-24  
**Date of Last Exhibit 300A Update:** 2012-08-23  
**Date of Last Revision:** 2012-08-23

**Agency:** 021 - Department of Transportation      **Bureau:** 12 - Federal Aviation Administration

**Investment Part Code:** 01

**Investment Category:** 00 - Agency Investments

**1. Name of this Investment:** FAAXX036: Terminal Primary Surveillance (TPS)

**2. Unique Investment Identifier (Ull):** 021-006227212

#### Section B: Investment Detail

- 1. Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The FAA's Terminal Primary Surveillance systems are airport surveillance radar (ASR) systems that provide aircraft detection and weather information to terminal automation systems within the Terminal Radar Approach Control (TRACON) facilities; TPS data is displayed on the Standard Terminal Automation Replacement System (STARS), Automated Radar Terminal System (ARTS), and Common Automated Radar Terminal System (CARTS) terminals. This data is utilized by air traffic controllers to safely and efficiently separate aircraft in the terminal environment. The systems also provide data to the Airport Surface Detection Equipment - Model X (ASDE-X), which is used for surface surveillance to reduce the likelihood of runway incursions. The primary radars included in this program are the ASR-8, ASR-9, and ASR-11 systems, some of which are more than 20 years old. Various components have already undergone technical refresh efforts, most notably to convert them from analog to digital technology. The FAA is planning to replace these legacy systems, with a Final Investment Decision for the new technology planned for 2017. In the meantime, the purpose of the TPS program is to extend the service life of these radars through 2025. The approach for this program is to continually work with FAA's Logistics Center and ASR manufacturers, to identify and remediate any problems with the aging systems. This includes identifying parts that are no longer being manufactured, and the need to re-engineer components. The Mobile ASR (MASR) will also facilitate relocation efforts, when an existing

radar structure/facility must be moved in order to support other airport upgrades (eg, building a new control tower). Programs that hold a dependency with TPS include: STARS/TAMR, ASDE-X, Runway Status Lights (RWSL), FAA Telecommunications Infrastructure (FTI), and EnRoute Automation Modernization (ERAM).

**2. How does this investment close in part or in whole any identified performance gap in support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.**

This critical group of programs allows FAA to maintain the legacy primary surveillance radars throughout the terminal environment. Without the modifications performed through this programs, FAA's TPS systems would continue to experience decreasing reliability and availability over time. The cost of continuing tech refresh has been deemed more cost-effective than acquiring new systems at this time, because current performance is effective in meeting both the safety and capacity needs of the nations air traffic system.

**3. Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

This investment is predominately Steady State (O&M) and therefore all of the major acquisition milestones have already been successfully achieved: • ASR-8, ASR-9, and ASR-11 continued with O&M activities. In addition, the ASR-9 Transmitter Modification upgrade was completed. • ASR-9 and ASR-11 also met all of their 2010 performance goals in the areas of Mission and Business Results, Technology, Customer Results, Process and Activities.

**4. Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

The ASR-9 radars are completely operational and will continue to be maintained for FY12 and FY13. Planned accomplishments for FY12 and FY13 for other primary surveillance radars in this consolidation include: • Complete necessary facility upgrades for ASR-8 radars at San Juan and St. Thomas. • Initiate acquisition activities for the second planned ASR-9 Service Life Extension Program (SLEP). • Continue the technology refresh activities for the ASR-11 radars. • Begin acquisition activities for the Mobile Airport Surveillance Radars.

**5. Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2005-07-15

## Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	\$36.5	\$2.0	\$0.0	\$0.0
DME (Excluding Planning) Costs:	\$748.2	\$6.7	\$9.9	\$14.6
DME (Including Planning) Govt. FTEs:	\$24.2	\$2.3	\$0.0	\$0.0
Sub-Total DME (Including Govt. FTE):	\$808.9	\$11.0	\$9.9	\$14.6
O & M Costs:	\$103.1	\$2.1	\$2.1	\$2.1
O & M Govt. FTEs:	\$58.6	\$14.2	\$14.5	\$14.8
Sub-Total O & M Costs (Including Govt. FTE):	\$161.7	\$16.3	\$16.6	\$16.9
Total Cost (Including Govt. FTE):	\$970.6	\$27.3	\$26.5	\$31.5
Total Govt. FTE costs:	\$82.8	\$16.5	\$14.5	\$14.8
# of FTE rep by costs:	570	102	92	90
Total change from prior year final President's Budget (\$)		\$0.0	\$-4.7	
Total change from prior year final President's Budget (%)		0.00%	-15.06%	

**2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:**

Funding for the Bismarck, ND ASR-8 relocation was removed. Funding for the ASR-9 SLEP Phase 2 and 3 effort was added in FY14, FY15, FY16 and FY17 - CIP line #S03.01-09.

## Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value (\$M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded		<a href="#">FA8730-08-D-0001</a>									
Awarded		F19028-96-D-0038									
Awarded		DTFAAC-07-D-00048									
Awarded		<a href="#">DTFAWA09C00052</a>									
Awarded		<a href="#">DTFAWA09C00053</a>									
Awarded		<a href="#">DTFAWA09C00039</a>									
Awarded		<a href="#">DTFAWA09C00042</a>									
Awarded		DTFACT09D00010									
Awarded		DTFAAC07D00004									
Awarded		<a href="#">DTFAEN-11-C-00434</a>									
Awarded		<a href="#">DTFAWA-09-C-00041</a>									
Awarded		<a href="#">DTFAWA-09-C-00041</a>									

**2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:**

Major acquisition deployment for the primary ASR-9 and ASR-11 radars is complete and EVM was performed in alignment with the FAA requirements. Due to the nature of headquarters support contracts, a decision was made to use Cost Plus Fixed Fee (CPFF) contracts; however, the program requires all support contracts to provide data necessary to perform EVM at the program level. EVM is currently being

executed at the program level, support contracts are rolled into work packages, actual costs are obtained from invoices, and earned value is accrued as a level of effort.

## Exhibit 300B: Performance Measurement Report

### Section A: General Information

**Date of Last Change to Activities:** 2012-07-25

### Section B: Project Execution Data

**Table II.B.1 Projects**

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost (\$M)
1	Airport Surveillance Radar-9 (ASR-9) Service Life Extension Program (SLEP) Phase 2	Modifications to existing systems to extend the service life of ASR-9 radars to FY2025.			
2	Airport Surveillance Radar-11 Technology Refreshment	Replacement and upgrade of known obsolete Terminal Radar Digitizing (ASR-11) hardware and software to ensure continued operation of the radar system through its designated lifecycle.			
3	Mobile Airport Surveillance Radar (MASR)	Provide short term and emergency surveillance service for existing surveillance asset relocations or in-service moves.			
4	Airport Surveillance Radar (ASR-8) Facility Upgrades	Complete repairs/updates to ASR-8 facilities at San Juan & St. Thomas.			

### Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M)	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
------------	------	--	---------------------------------------	---------------------------------	---------------------	-------------------	--------------------------	---------------------

## Activity Summary

## Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities (\$M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance (\$M )	Cost Variance (%)	Total Planned Cost (\$M)	Count of Activities
1	Airport Surveillance Radar-9 (ASR-9) Service Life Extension Program (SLEP) Phase 2							
2	Airport Surveillance Radar-11 Technology Refreshment							
3	Mobile Airport Surveillance Radar (MASR)							
4	Airport Surveillance Radar (ASR-8) Facility Upgrades							

## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
1	ASR-9 SLEP Phase 2 Investment Analysis	Develop draft Final Investment Decision (FID) documentation.	2012-04-30	2012-06-30	2012-06-27	304	-58	-19.08%
4	ASR-8 SLEP - Site prep for St. Thomas	Site preparation for ASR-8 facility at St. Thomas.	2012-05-31	2012-09-30		335	-122	-36.42%
4	ASR-8 SLEP - Site prep for San Juan	Site preparation for ASR-8 facility at San Juan.	2012-05-31	2012-09-30		335	-122	-36.42%
1	ASR-9 SLEP Phase 2 Preparation for FID	Complete final investment analysis decision documentation for the FID.	2012-07-31	2012-07-31	2012-06-27	91	34	37.36%
3	Mobile Airport Surveillance Radar (MASR) Preparation for FID	Complete final investment analysis decision documentation	2012-07-31	2012-06-20	2012-06-20	121	41	33.88%



## Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days )	Schedule Variance (%)
		necessary for FID.						
3	Mobile Airport Surveillance Radar (MASR) Post FID activities	Preparation for MASR contract award	2012-09-30	2012-09-30		101	0	0.00%

## Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
The number of unscheduled ASR-9 outages at each site per year.	Number	Technology - Reliability and Availability	Under target	1.790000	1.750000		1.700000	Monthly
The number of unscheduled ASR-11 outages at each site per year.	Number	Technology - Reliability and Availability	Under target	0.950000	0.900000		0.850000	Monthly
Operational Availability for ASR-9	Percentage	Customer Results - Service Coverage	Over target	99.400000	99.450000		99.450000	Monthly
Operational Availability for ASR-11	Percentage	Customer Results - Service Coverage	Over target	99.500000	99.510000		99.520000	Monthly
Operational cost of the ASR-11 legacy system (ASR-11 Tech Refresh)	Dollars	Technology - Technology Costs	Under target	15.782000	15.782000		16.710000	Semi-Annual